

**REMARKS**

This Preliminary Amendment constitutes the proper Submission with the RCE being concurrently filed and fully complies with M.P.E.P. § 706.07(h)(II).

Applicants respectfully request the Examiner to reconsider the present application in view of the foregoing amendments to the claims and the following remarks.

***Status of the Claims***

In the present Amendment, claims 2 and 29 have been amended. Also, claims 4, 8, and 30 have been canceled, wherein claims 1, 3, 5-7, 11, and 16-27 were previously canceled, without prejudice or disclaimer of the subject matter contained therein. Thus, claims 2, 9, 10, 12-15, 28 and 29 are pending in the present application, wherein claims 2 and 29 are independent.

No new matter has been added by way of the amendment to claim 2. The amendment to claim 2 has support in the present specification at least in paragraphs [0012], [0044]-[0048] and [0050]. Claim 29 has been amended into independent form by incorporating the subject matter of base claim 2. Also regarding claim 29, Applicants also note the mentioned support above for claim 2.

Based upon the above considerations, entry of the present amendment is respectfully requested.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

***Issues under 35 U.S.C. § 102(a)***

Claims 2, 8, 12-15 and 30 are rejected under 35 USC § 102(a) as being anticipated by **Lasseter et al.** (*J. Am. Chem. Soc.*, Vol. 126, pp. 10220-10221 (2004)) (Office Action, paragraph 1). Applicants respectfully traverse.

Applicants herein concurrently file the verified English language translation of the priority document for the present application (JP 2004-100186). Lasseter et al. was published on the web on July 30, 2004. Thus, the present application has the benefit of priority to March 30, 2004. In this regard, the cited Lasseter et al. reference is not considered prior art against the present application. Thus, reconsideration and withdrawal of this rejection is respectfully requested.

***Issues under 35 U.S.C. § 103(a)***

Claims 2, 4, 8 and 12-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over **Woo '736** (U.S. Patent No. 6,761,736) as evidenced by **Hamers et al.** (*Langmuir*, Vol. 18, pp. 968-971 (2002)) (Office Action, paragraph 2).

Also, claims 2, 4, 12-15 and 23-30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over **Steffen et al.** (*Sur. Interface Anal.*, Vol. 29, pp. 386-391 (2000)) in view of **Palmaz '310** (U.S. Patent No. 6,537,310 B1) as evidenced by **Hamers et al.** (Office Action, paragraph 3).

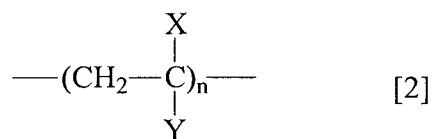
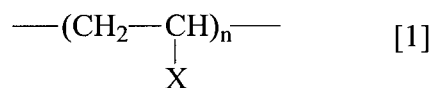
Further, claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over **Steffen et al.** and **Palmaz '310** as evidenced by **Hamers et al.** as applied to claim 2, in further view of **Lemelson '570** (U.S. Patent No. 6,083,570) (Office Action, paragraph 4).

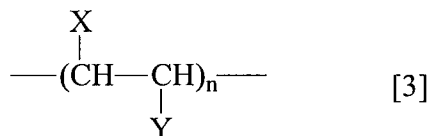
In addition, claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over **Steffen et al.** and **Palmaz et al.**, as evidenced by **Hamers et al.**, and further in view of **Suto et al.** (*J. Bio. Chem.*, Vol. 280(3), pp. 2126-2131 (2005)) (Office Action, paragraph 5).

Finally, claims 8 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over **Steffen et al.** and **Palmaz '310** as evidenced by **Hamers et al.** as applied to claim 2, in further view of **Han et al. '161** (U.S. Patent No. 6,268,161 B1).

Applicants respectfully traverse and reconsideration is based on the following remarks. Overall, Applicants do not concede that a *prima facie* case of obviousness has been established with respect to any of the rejections.

Applicants have noted the Examiner's interpretation of claim 2 (and any dependent claim thereon) at pages 2-3 and the top of page 12, and the interpretation of claim 29 at pages 7-8 of the Office Action. However, Applicants respectfully refer the Examiner to the independent claims as shown herein. Claim 1 recites, *inter alia*, “. . . said biocompatible component is a polymer chain, one end of the polymer chain is covalently bonded to the surface of the diamond-like carbon film, and polymer chain has a structure represented by any one of the following formulas [1]-[3], which are:





In this regard, the cited primary reference of Steffen fails to teach the structure of a biocompatible component including polymer chains having a structure represented by  $\text{---}(\text{CH}_2\text{---CHX})_n\text{---}$ ,  $\text{---}(\text{CH}_2\text{---CXY})_n\text{---}$ , and  $\text{---}(\text{CHX---CHY})_n\text{---}$ , as well as failing to disclose a feature in which one end of the polymer chain is covalently bonded to the surface of the diamond-like carbon film. Further, the cited secondary reference(s) fail to account for the deficiencies of the primary reference.

For instance, neither Palmaz '310 nor Hamers et al. discloses or teaches the feature wherein one end of the polymer chain is covalently bonded to the surface of the diamond-like carbon film. This is also true of the other cited secondary references.

Even if, *arguendo*, Palmaz '310 or Hamers et al. was combined with Steffen, such a combination would not render the present invention as obvious as such a combination does not even disclose or teach all claimed features. As the M.P.E.P. directs, all claim limitations must be considered in view of the cited prior art in order to establish a *prima facie* case of obviousness. See M.P.E.P. § 2143.03.

Regarding the rejection of claim 8 in view of Steffen et al., Palmaz et al., as evidenced by Hamers et al., and Suto et al., Suto et al. is not prior art against the present application. As explained above, the present application has benefit of priority of March 30, 2004.

Regarding the last rejection of claims 8 and 28 in view of Steffen, Palmaz '310 as evidenced by Hamers et al., in further view of Han et al. '161, this rejection is improper for the reasons stated above. Citing Hamers et al. does not make the combination of Steffen and Palmaz '310 any more proper. Furthermore, Hamers et al. does not even disclose the feature wherein one end of the polymer chain is covalently bonded to the surface of the diamond-like carbon film.

Also regarding claim 28, this claim recites, *inter alia*, “. . .the biocompatible component is a polymer of hydrophilic 2-hydroxypropyl methacryl amide.” The cited Han et al. '161 patent merely discloses poly (2-hydroxypropylmethacrylate) (HPMA), but this is not the same polymer as being instantly claimed (hydrophilic 2-hydroxypropyl methacryl amide). Thus, Hans et al. fails to disclose the claimed polymer, in addition to failing to disclose one end of the polymer chain being covalently bonded to the surface of the diamond-like carbon film. Hans et al. '161 cannot be properly combined with the other cited references.

Claim 29 is now in independent form. Claim 29 recites, *inter alia*, “. . . said biocompatible component is a polymer chain, and the polymer chain has a structure represented by” any one of  $-(CH_2-CHX)_n-$ ,  $-(CH_2-CHXY)_n-$ , and  $-(CHX-CHY)_n-$ . Further, claim 29 recites that the polymer chain is covalently bonded via an ester linkage to the surface of the diamond-like carbon film. The cited Steffen reference fails to disclose these features. Also, neither Palmaz '310 nor Hamers et al. teaches the claimed polymer chain being covalently bonded via an ester linkage to the surface of the diamond-like carbon film. Thus, the cited combination of references fails to disclose all claimed features, nor is such a combination even proper. Applicants request the rejection of claim 29 be withdrawn.

Reconsideration and withdrawal of all rejections are respectfully requested.

***Conclusion***

A full and complete response has been made to all issues as cited in the Office Action. Applicants have taken substantial steps in efforts to advance prosecution of the present application, including the filing of the present RCE. Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Eugene T. Perez (Reg. No. 48,501) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Application No. 10/594,918

Docket No.: 4633-0189PUS1

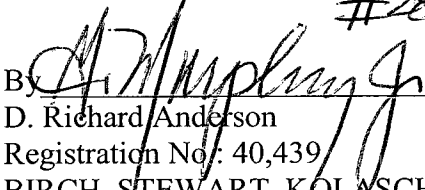
Art Unit 1794

Amendment to Final Office Action of October 30, 2009

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: February 1, 2010

Respectfully submitted,

*for*  *#28977*  
By \_\_\_\_\_  
D. Richard Anderson  
Registration No.: 40,439  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Road, Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000  
Attorney for Applicant

Attachment: Verified English language translation of JP 2004-100186